



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,147	08/22/2001	James P. Janniello	YOR920010386US2	3376
48062 7590 04/02/2008 RYAN, MASON & LEWIS, LLP 1300 POST ROAD SUITE 205 FAIRFIELD, CT 06824				
EXAMINER				
STRANGE, AARON N				
ART UNIT		PAPER NUMBER		
2153				
MAIL DATE		DELIVERY MODE		
04/02/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/938,147
Filing Date: August 22, 2001
Appellant(s): JANNIELLO ET AL.

Kevin M. Mason
Reg. No. 36,597
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/11/2008 appealing from the Office action mailed 11/16/2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner as unnecessarily cumulative.

The rejection of claims 1-13 and 15-27 as being unpatentable over Carter et al. (US 6,026,474) in view of Mao et al. (US 6,886,178). It should be noted that the rejection of claim 28, under the same grounds, has not been withdrawn.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Humphrey	US 2002/0129116	Sep. 12, 2002 (filed Mar. 15, 1999)
Mao	US 6,886,178	Apr. 26, 2005 (filed Jul 29, 1998)
Carter	US 6,026,474	Feb. 15, 2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 21-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 21-23 are directed to an article of manufacture comprising "a computer readable medium having computer readable code means embodied thereon". In view of Appellants' specification (Spec. 12), the computer readable medium may be a

transmission medium such as a fiber-optic network, wireless channel, or other radio-frequency channel. Computer readable code embodied on a radio frequency channel, for example, is non-statutory. Since Appellants have not limited the claim to statutory embodiments, it is non-statutory.

Claims 1-13 and 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. (U.S. Patent Number 6,026,474; hereinafter Carter) and Humphrey (U.S. Patent Application Publication Number 2002/0129116).

In considering claim 1, Carter disclosed a method for storing digital content in a client-side cache, said method comprising the steps of:

receiving content broadcast to a client (see Col 27, lines 65-66) wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 17-19);

storing said received content in said client-side cache (see Col 28, lines 7-10) based on a user profile (e.g. migration controller manages the storage of content based on, inter alia, user data access patterns, Col 14, lines 40-46);

and making said content in said client-side cache available to other clients (see Col 28, line 17-19).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client

caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28, lines 7-8). However, Carter fails to specifically recite client caches obtaining content over a wireless broadcast connection. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection was well known in the art at the time of the invention, as evidenced by Humphrey.

In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

In considering claim 2, Carter discloses the method of claim 1, further comprising the step of determining if requested content is in said client-side cache before requesting said content from a remote source (see Col 28, lines 21-27).

In considering claim 3, Carter discloses the method of claim 1, further comprising the step of requesting said content from an edge server if said requested content is not in said client-side cache. This is an inherent step in Carter's design. Carter discloses downloading content from a server into a cache (Col 27, line 65). This step only occurs when the requested content is not found in the cache.

In considering claim 4, Carter discloses the method of claim 1, further comprising the step of requesting said content from a provider of said content if said requested content is not in said client-side cache. This is an inherent step in Carter's design. Carter discloses downloading content from a content provider into a cache (Col 27, line 65). This step only occurs when the requested content is not found in the cache.

In considering claim 5, Carter discloses the method of claim 1, further comprising the step of requesting said content from another client cache if said requested content is not in said client- side cache (see Col 28, lines 30-34).

In considering claim 6, Carter discloses the method of claim 5, wherein said step of requesting said content from another client cache further comprises the step of accessing a directory to determine where said content is cached (see Col 7, lines 14-21).

In considering claim 7, Carter discloses the method of claim 1, further comprising the step of providing information to a central cache directory regarding content that is stored in said client- side cache (see Col 28, lines 22-23).

In considering claim 8, Carter discloses the method of claim 1, wherein said content in said client-side cache is made available to other clients using a point-to-point link (see Col 11, line 18).

In considering claim 9, Carter discloses a method for obtaining content over a network, said method comprising the steps of determining if requested content is in a local cache; and

requesting said content from a remote client cache if said requested content is not in said local cache, wherein said content in said remote client cache was broadcast to a client, wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 27- 34) and wherein said content was stored in said remote client cache based on a user profile (e.g. migration controller manages the storage of content based on, inter alia, user data access patterns, Col 14, lines 40-46).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28, lines 7-8). However, Carter fails to specifically recite client caches obtaining content

over a wireless broadcast connection. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection was well known in the art at the time of the invention, as evidenced by Humphrey.

In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

In considering claim 10, Carter discloses the method of claim 9, further comprising the step of requesting said content from a remote source if said requested content is not in said remote client cache. This is an inherent step in Carter's design. Carter discloses downloading content from a remote source into a cache (Col 27, line 65) and making the cached content available to other users in a global client cache (Col

28, line 19). The step of downloading content from a remote source only occurs when the requested content is not found in the cache.

In considering claim 11, Carter discloses the method of claim 9, further comprising the step of requesting said content from an edge server if said requested content is not in said remote client cache. This is an inherent step in Carter's design. Carter discloses downloading content from a server into a cache (Col 27, line 65). This step only occurs when the requested content is not found in the cache.

In considering claim 12, Carter discloses the method of claim 9, further comprising the step of requesting said content from a provider of said content if said requested content is not in said remote client cache. A content provider is considered to be a remote source as referenced in claim 10, therefore claim 12 is rejected on the same basis as claim 10.

In considering claim 13, Carter discloses the method of claim 9, wherein said step of requesting said content from a remote client cache further comprises the step of accessing a directory to determine where said content is cached (see Col 7, lines 14-20).

In considering claim 15, Carter discloses a method for sharing digital content among a plurality of users, said method comprising the steps of:

storing content broadcast to a client in a client-side cache of at least one client (see Col 27, line 65 and Col 28, lines 7-8), wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 17-19) and wherein said content was stored in said remote client cache based on a user profile (e.g. migration controller manages the storage of content based on, inter alia, user data access patterns, Col 14, lines 40-46);

making said content in said client-side cache available to a plurality of additional clients (see Col 2, lines 38-43);

and maintaining a directory of said content made available to a plurality of additional clients (see Col 7, lines 17-20).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28, lines 7-8). However, Carter fails to specifically recite client caches obtaining content over a wireless broadcast connection. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection was well known in the art at the time of the invention, as evidenced by Humphrey.

In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of

a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

In considering claim 16, Carter discloses the method of claim 15, wherein a user determines if requested content is in said directory before requesting said content from another remote source (see Col 5, lines 48-58).

In considering claim 17, the method of claim 15, wherein said content in said client-side cache is made available to other clients using a point-to-point link (see Col 11, line 18).

In considering claims 18 and 21, Carter discloses a system for storing digital content in a client-side cache, said system comprising:

- a memory that stores computer-readable code (see Fig 1, Component 34c); and
- a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to (see Fig 1, Component 30c)

receive content broadcast (from a central server) to a client (see Col 27, line 65), wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 17-19);

store said received content in said client-side cache (see Col 28, lines 7-10) based on a user profile (e.g. migration controller manages the storage of content based on, inter alia, user data access patterns, Col 14, lines 40-46);

and make said content in said client-side cache available to other clients (see Col 28, lines 17-19).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28, lines 7-8). However, Carter fails to specifically recite client caches obtaining content over a wireless broadcast connection. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection was well known in the art at the time of the invention, as evidenced by Humphrey.

In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the

teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which, provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

In considering claim 19, Carter discloses a system for obtaining content over a network, said system comprising:

- a memory that stores computer-readable code (see Fig 1, Component 34c); and
- a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to (see Fig 1, Component 30c) :

- determine if requested content is in a local cache (see Col 28, lines 23-34); and
 - request said content from a remote client cache if said requested content is not in said local cache, wherein said content in said remote client cache was broadcast to a client (see Col 28, lines 23-34), wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 17-19) and wherein said content was stored in said remote client cache based on a user profile (e.g. migration controller manages the storage of content based on, inter alia, user data access patterns, Col 14, lines 40-46).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client

caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28, lines 7-8). However, Carter fails to specifically recite client caches obtaining content over a wireless broadcast connection. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection was well known in the art at the time of the invention, as evidenced by Humphrey.

In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

In considering claim 20, Carter discloses a system for sharing digital content among a plurality of users, said system comprising:

a memory that stores computer-readable code (see Fig 1, Component 34c); and

a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said computer-readable code configured to (see Fig 1, Component 30c)

store content broadcast to a client in a client-side cache of at least one client (see Col 28, lines 7-10), wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 17-19);

make said content in said client-side cache available to a plurality of additional clients (see Col 28, lines 17-19);

and maintain a directory of said content made available to a plurality of additional clients (see Col 7, lines 17-20).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28, lines 7-8). However, Carter fails to specifically recite client caches obtaining content over a wireless broadcast connection. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection was well known in the art at the time of the invention, as evidenced by Humphrey.

In a similar art, Humphrey discloses a caching system which uses a high speed one way satellite link to broadcast data from a master caching center to multiple local caching systems (see Humphrey, paragraph 31). The data broadcast to the local caching system is sent based on the selections for content from the local caching systems (see Humphrey, paragraph 31). Humphrey further discloses that the benefit of

a "high speed cache update or broadcast channel provides the network with fast relief from redundant data transport and will quickly reduce congestion." Thus, given the teaching of Humphrey, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides client-side caches with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

In considering claim 21, claim 21 contains no further limitations over claim 18, and is therefore rejected on the same basis as claim 18.

In considering claim 22, claim 22 contains no further limitations over claim 19, and is therefore rejected on the same basis as claim 19.

In considering claim 23, claim 23 contains no further limitations over claim 20, and is therefore rejected on the same basis as claim 20.

Regarding claims 24-27, Carter fails to specifically recite content broadcast to said client is broadcast prior to being requested by a user or where received content was predicted to be of interest to a user. In a related art, Humphrey discloses predicting content of interest to a user (pg 2, ¶ 24) and then sending the content predicted to be of interest prior to a client request (pg 2, ¶ 25). It would have been obvious to one of

ordinary skill in the art at the time of the invention to incorporate the content prediction and transmission system disclosed by Humphrey within Carter's system in order to relieve the network from transporting replicated data and redundant information (Humphrey pg 2, ¶ 25).

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. (U.S. Patent Number 6,026,474; hereinafter Carter) and Mao et al. (U.S. Patent Number 6,886,178; hereinafter Mao).

Regarding claim 28, Carter disclosed a method for storing digital content in a client-side cache, said method comprising the steps of:

receiving content broadcast to a client (see Col 27, lines 65-66);

storing said received content in said client-side cache (see Col 28, lines 7-10), wherein said client is a machine that serves one or more users on a local area network (see Col 28, lines 17-19) based on a user profile (e.g. migration controller manages the storage of content based on, inter alia, user data access patterns, Col 14, lines 40-46).;

and making said content in said client-side cache available to other clients (see Col 28, line 17-19).

Carter teaches a client-side caching system where clients share their respective caches with each other as discussed above. Carter further teaches remote client caches obtaining content broadcast from a given server (see Col 17, line 65 and Col 28,

lines 7-8). However, Carter fails to specifically recite client caches obtaining content over a wireless broadcast connection where the client is tuned to receive the content via digital television channel. Nonetheless, the feature of obtaining content for a cache over a wireless broadcast connection where the client is tuned to receive the content via digital television channel was well known in the art at the time of the invention, as evidenced by Mao.

In a similar art, Mao discloses a broadcasting system (abstract) which uses a wireless broadcast connection (direct broadcast satellite) to broadcast data to multiple clients (e.g. set top boxes) (see Mao, Col 6, line 1 and lines 6-14). Mao further disclosed the client is tuned to receive the content through said wireless broadcast connection via a digital television channel (e.g. MPEG feed) (Mao, Col 5, lines 22-36) Thus, given the teaching of Mao, it would have been obvious to a person having ordinary skill in the art to design the Carter system with a satellite link broadcast system which provides clients with content, in order to design a more efficient system. The system is more efficient since it provides fast relief from redundant data transport, which reduces congestion.

(10) Response to Argument

Regarding claims 21-23, rejected under 35 U.S.C. §101, Appellants argue that “computer readable code means is classified as functional descriptive material and that claims 21-23 are therefore directed to statutory subject matter” (Br. 8). However, the mere fact that computer readable code may be functional descriptive material is insufficient. While claims 21-23 are nominally directed to an “article of manufacture”, the

body of the claim contains only "a computer readable medium" storing computer code. The specification clearly states that the term "computer readable medium" is intended to include a "transmission medium", such as a fiber-optic cable, or radio frequency channel (i.e., light pulses or electrical signals). These embodiments are non-statutory, since they do not fall within any of the four statutory categories, including "manufactures". See *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007).

Accordingly, since the claims are not limited to statutory embodiments they are non-statutory.

Regarding claims 1, 9, 15, 18-23 and 28, rejected under 35 U.S.C. §103(a), all of which claims are independent, Appellants argue these claims collectively and have presented no separate arguments to dependent claims 2-8, 10-13, 16, 17, 24 and 26. Dependent claims 25 and 27, argued separately, are addressed below.

Appellants argue that the combination of Carter and Humphrey "does not disclose or suggest storing content based on a user profile" (Br. 9), and present two principal arguments related to this point. The Examiner will address claim 1 as representative of all claims encompassed by this rejection.

Appellants argue a) that "Carter does not disclose or suggest that the data access patterns are lists or that the access patterns indicate a degree of interest of the user" (Br. 9).

Regarding argument a), it should be noted that the present claims contain no language requiring the presence of a list or anything to "indicate a degree of interest of a user". Appellants cite to a report by a third party, Lalmas et al. (Br. 8-9) in an apparent attempt to define the term "user profile". However, the Lalmas et al. report was not of record before the Examiner and has not been incorporated by reference into the present application. Therefore, its relevance appears to be minimal, at best.

Furthermore, the specification clearly states "for example, the user profile 260 might provide a list of the users most popular sites" (emphasis added)(Br. 8; p. 6, l. 10 of Spec., as amended on 1/17/2006). Therefore, it is clear that the term "user profile" has not been defined by the specification or the claims. Therefore, it must be given its broadest reasonable interpretation consistent with the specification. In this case, Carter teaches that the received content is stored in a cache based on various factors, including data access patterns such as data that has been "recently accessed" (col. 14, ll. 34-44; col. 27, ll. 17-19). These "data access patterns" are analogous to user profiles since they reflect the patterns (frequency, how recently, etc) with which particular users access portions of the addressable memory space.

Appellants argue b) that "Carter does not disclose or suggest that the data access patterns indicate the access patterns of a single user and, thus, cannot provide a profile of a user" (Br. 9).

Regarding argument b), the Examiner respectfully disagrees, since the data access patterns taught by Carter do indicate access patterns of a single user. Carter teaches that each user has a separate cache (each terminal has a local storage device that stores recently accessed web pages)(col. 27, ll. 14-21), and that each user shares their local cache with the other users in the group (col. 27, ll. 38-39).

The plurality of individual caches allows each user's data access patterns to be taken into account to ensure the best service for each user. For example, when one user requests a web pages, it will be stored in its local cache (col. 28, ll. 18-22) and a cache file will be created in the distributed system, giving other users access to the same file (col. 28, ll. 21-22). Then, the second user may access the page without requiring the Web server to retransmit it (col. 28, ll. 27-34). Since the pages are stored when requested by a particular user, the data access patterns of particular users are taken into account, and the cache storage is based on a "profile" of the user's data access patterns.

Furthermore, since Carter teaches that each node has a separate cache (col. 27, ll. 14-21) and that the migration controller moves data, based on data access patterns, to "nodes from which it is commonly accessed", it is clear that the movement occurs based on how commonly a particular user/node accesses the data.

Carter's entire system is based on the sharing of information from a plurality of local caches, each local cache being filled based on the access patterns of the user associated with that cache. As discussed above, Appellants have failed to provide a limiting definition of the term "user profile", and information representing the data access

patterns of a particular user falls well within the broadest reasonable interpretation of that term.

Regarding dependent claims 25 and 27, Appellants argue that Humphrey fails to disclose or suggest determining what information is "predicted to be of interest to a user" (Br. 10). The Examiner respectfully disagrees. As admitted by Appellants, Humphrey teaches to "determine what information is of global interest to the Internet community" (§24). It is respectfully submitted that information determined to be "of global interest" is information that is predicted to be of interest to each user that the information is sent to. Humphrey does not know whether the information will be of interest to each and every user, but predicts that it will be of interest because it is of interest to a large number of other users.

In summary, Appellants arguments with respect to the rejection under 35 U.S.C. §103(a) essentially rely on a definition of "user profile" that is not present in the specification or the claims, appearing only in a third party publication, not of record, and not incorporated by reference into the specification. The broadest reasonable interpretation of the term "user profile", consistent with the specification, is very broad, since a user profile can accurately describe almost any type of information about a user. In this case, the data access patterns taught by Carter fall well within the broadest reasonable interpretation of that term.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Aaron Strange/

Examiner, Art Unit 2153

Conferees:

/Glenton B. Burgess/

Supervisory Patent Examiner, Art Unit 2153

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151